

# Intelligent Transportation Systems Update

ITS technologies and systems increase efficiency of street operations.

Presentation by The Seattle Department of Transportation

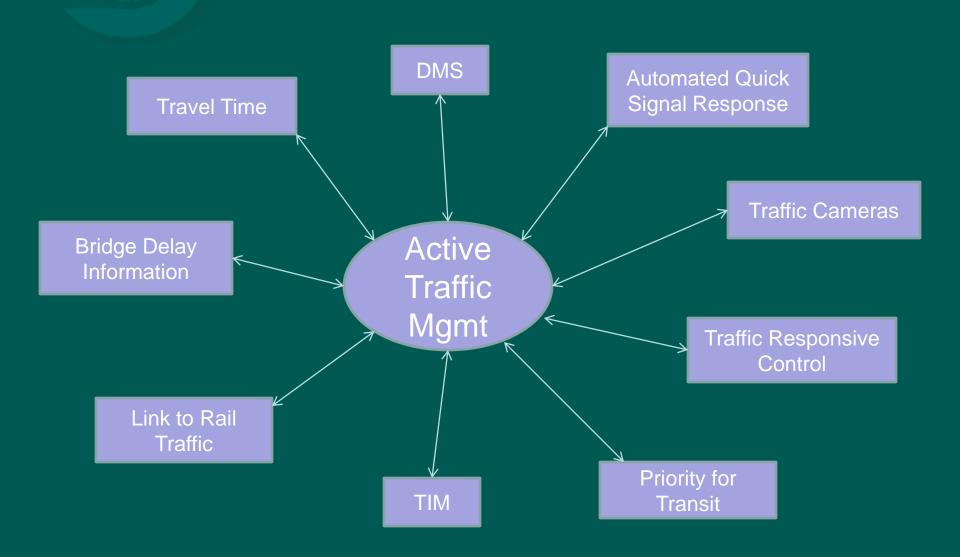


#### **Seattle ITS Contracts** SR520 EB 190 EXPRESS Legend Contract 1 Traffic Camera Contract 1 Dynamic Message Sign Contract 2 Traffic Camera Contract 2 License Plate Reader Contract 2 Controller Cabinet Upgrade Contract 3 Traffic Camera Contract 3 License Plate Reader Contract 3 Controller Cabinet Upgrade Contract 4 Dynamic Message Sign State Contract Traffic Camera State Contract License Place Reader D State Contract Dynamic Message Sign State Contract ATM Sign State Contract Controller Cabinet Upgrade

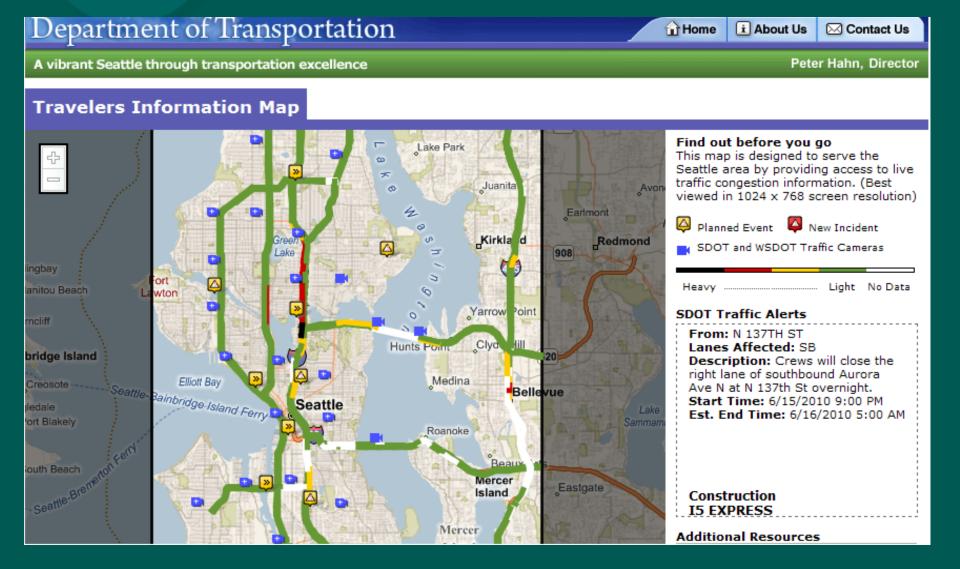
## **New Capabilities**

- Active Traffic Management
- Traveler Information Map (TIM)
- Dynamic Message Signs (DMS)
- Automated Traffic Signal Responses
- Real Time Public Information

# **Active Traffic Management**

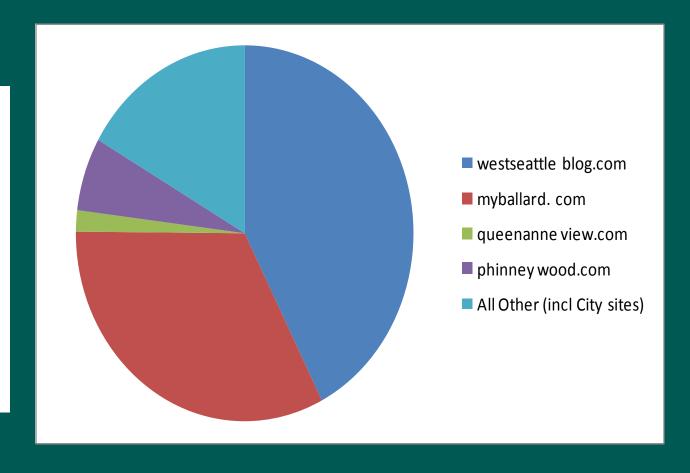


## Traveler's Information Map



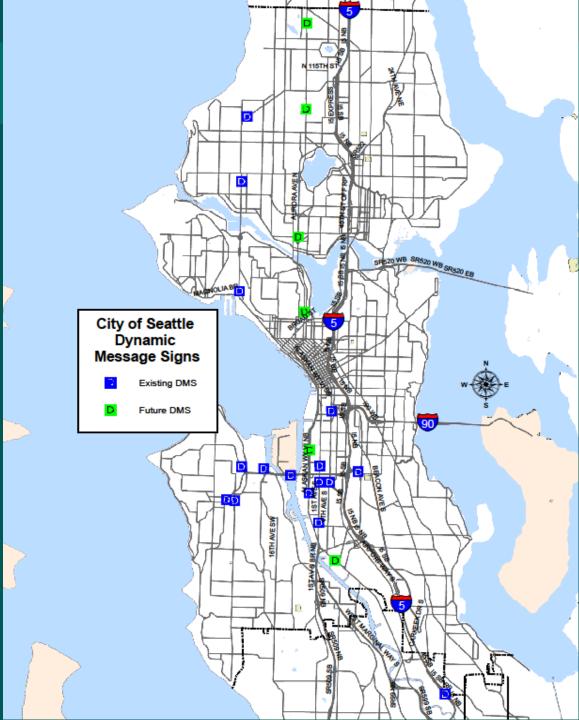
# Traffic Camera Page Hits

Year	Hits
2004	2.7M
2005	2.9M
2006	4.8M
2007	7.3M
2008	9.4M
2009	19.7M



# Dynamic Message Signs





## Automated Traffic Signal Responses

#### **Traffic Responsive**

- Automated traffic signal timing changes based on volume

#### Quick Signal Response for:

- Rail crossing, bridge opening, and special events,

#### Transit Priority:

- Buses, Light Rail, Streetcar



# Automated Sequence for 1 Ave S Bridge

- 1. Bridge Raised
- 2. Message on DMS

Bridge Raised Expect Delays

- 3. Bridge Lowers
- 4. Message on DMS

Bridge Lowered Traffic Clearing

5. Signal Timing Recovery Plan



### Real-time Public Information



**Traffic Cameras** 

**Travelers Web Site** 





Dynamic Message Signs

Alerts from the TMC



## ITS Strategic Plan 2010 - 2020

ITS Key Arterial Net Work

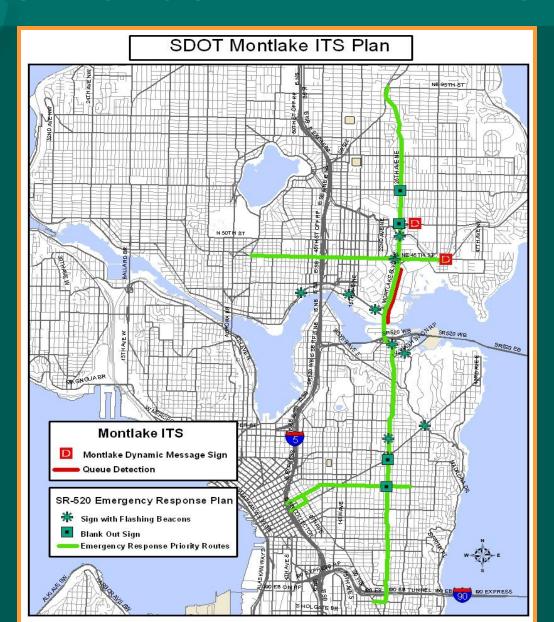
**ITS Subareas** 



## Ten Year Plan Cost

Rank	Project	Total Cost		Annual Cost (If applicable)
1	Active Traffic and Incident Management	\$	3,000,000.00	\$ 300,000
2	TMC Upgrades	\$	1,000,000.00	
3	ITS Maintenance	\$	20,000,000.00	\$ 2,000,000
4	Montlake ITS	\$	9,174,375.00	
5	Pedestrian/Bicycle ITS	\$	10,825,000.00	\$ 1,082,500
6	Downtown Retiming/Optimization	\$	1,000,000.00	
7	Traffic Signal Optimization	\$	10,000,000.00	\$ 1,000,000
8	South Lake Union/Seattle Center ITS	\$	5,323,500.00	
9	Transit ITS	\$	13,636,625.00	\$ 1,363,663
10	Traveler Information System Citywide	\$	4,000,000.00	\$ 400,000

### SR 520 / Montlake ITS



# Questions?

